

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-22. (cancelled)

23. (currently amended) A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs at the amino acid sequence level from the group of viruses consisting of HIV-1_{IIIB}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in the entire Gag protein, 3.1% in the entire Pol protein, and 13.0% in the entire Env protein,

wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus,

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641, and

wherein the genetic structure of said HIV-1 variant is 5-LTR-gag-pol-vif-vpr-tat-rev-vpu-env-nef-LTR-3', and

wherein the nucleic acid of said HIV-1 variant virus can be detected by stringent hybridization (50% formamide, 5X SSC, at 42°C, for 12-16 hours) to a DNA probe comprising the genomic cDNA of HIV-1_{MAL}.

24. (cancelled)

25. (previously presented) The HIV-1 variant virus of claim 23, wherein the nucleic acid of said HIV-1 variant virus can be detected by hybridization with a DNA probe comprising a restriction enzyme fragment of the cDNA of HIV-1_{MAL}, and wherein the restriction enzyme is selected from the group consisting of *Aval*, *BamHI*, *Bg/II*, *EcoRI*, *HincII*, *HindIII*, *KpnI*, *NdeI*, *PstI*, *SacI*, and *XbaI*.

26. (withdrawn) A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs genetically from the group of viruses
consisting of HIV-1_{IIIB}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol,
and 13.0% in Env, and from HIV-1_{BRU} by at least 20.7% in Env,
wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of
said HIV-1 variant virus, and
wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus
designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE
MICRO-ORGANISMES (CNCM) under No. I-641.

27. (withdrawn) A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs genetically from the group of viruses
consisting of HIV-1_{IIIB}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol,
and 13.0% in Env, and from HIV-1_{BRU} by at least 9.8 % in Gag,
wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of
said HIV-1 variant virus, and

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus
designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE
MICRO-ORGANISMES (CNCM) under No. I-641.

28. (withdrawn) A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs genetically from the group of viruses
consisting of HIV-1_{IIIB}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol,
and 13.0% in Env, and from HIV-1_{BRU} by at least 5.5% in Pol,
wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of
said HIV-1 variant virus, and
wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus
designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE
MICRO-ORGANISMES (CNCM) under No. I-641.

29. (withdrawn) A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs genetically from the group of viruses
consisting of HIV-1_{IIIB}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol,
and 13.0% in Env, and from HIV-1_{BRU} by at least 9.8 % in Gag, 5.5% in Pol, and 20.7%
in Env,
wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of
said HIV-1 variant virus, and

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus
designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE
MICRO-ORGANISMES (CNCM) under No. I-641.

30. (withdrawn) The HIV-1 variant virus of claim 29, wherein said HIV-1 variant
virus differs genetically from HIV-1_{MAL} by 0-10.8% in Gag, 0%-8.4% in Pol, and 0%-
19.8% in Env.

31. (withdrawn) The HIV-1 variant virus of claim 30, wherein said virus is HIV-
1_{MAL}.

32. (withdrawn) The HIV-1 variant virus of claim 30, wherein said virus is HIV-
1_{ELI}.

33. (withdrawn) The HIV-1 variant virus of any one of claims 26-30, wherein the
nucleic acid of said HIV-1 variant virus can be detected by hybridization with a DNA
probe selected from the group of nucleic acids consisting of the genomic cDNA of HIV-
1_{MAL} and restriction enzyme fragments of the cDNA of HIV-1_{MAL}, and wherein the
restriction enzyme is selected from the group consisting of *Aval*, *BamHI*, *Bg/II*, *EcoRI*,
HincII, *HindIII*, *KpnI*, *NdeI*, *PstI*, *SacI*, and *XbaI*.

34. (withdrawn) A purified HIV-1 variant virus,

wherein said HIV-1 variant virus differs genetically from HIV-1_{BRU} by at least 21.7% in Env,
wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and
wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.

35. (withdrawn) A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs genetically from the group of viruses consisting of HIV-1_{IIIB}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol, and 13.0% in Env, and from HIV-1_{BRU} by at least 12.0 % in Gag,
wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and
wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.

36. (withdrawn) A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs genetically from the group of viruses consisting of HIV-1_{IIIB}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol, and 13.0% in Env, and from HIV-1_{BRU} by at least 7.7% in Pol,

wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.

37. (withdrawn) A purified HIV-1 variant virus,
wherein said HIV-1 variant virus differs genetically from the group of viruses consisting of HIV-1_{IIIB}, HIV-1_{BRU}, and HIV-1_{ARV-2} greater than 3.4 % in Gag, 3.1% in Pol, and 13.0% in Env, and from HIV-1_{BRU} by at least 9.8 % in Gag, 5.5% in Pol and 20.7% in Env,

wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus, and

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641.

38. (withdrawn) The HIV-1 variant virus of any one of claims 34-37, wherein the nucleic acid of said HIV-1 variant virus can be detected by hybridization with a DNA probe selected from the group of nucleic acids consisting of the genomic cDNA of HIV-1_{MAL} and restriction enzyme fragments of the cDNA of HIV-1_{MAL}, and wherein the

restriction enzyme is selected from the group consisting of *Aval*, *BamHI*, *BgII*, *EcoRI*, *HincII*, *HindIII*, *KpnI*, *NdeI*, *PstI*, *SacI*, and *XbaI*.

39. (withdrawn) A purified HIV-1 variant virus of claim 23, wherein said HIV-1 variant virus differs at the amino acid sequence level from the group of viruses consisting of HIV-1_{III B}, HIV-1_{BRU}, and HIV-1_{ARV-2} at least 9.8% in the entire Gag protein, 5.5% in the entire Pol protein, and 20.7% in the entire Env protein,

wherein antibodies in AIDS patient sera bind to Gag, Pol, or Env polypeptides of said HIV-1 variant virus,

wherein said antibodies bind to Gag, Pol, or Env polypeptides of the virus designated HIV-1_{MAL} deposited at the COLLECTION NATIONALE DES CULTURES DE MICRO-ORGANISMES (CNCM) under No. I-641, and

wherein the genetic structure of said HIV-1 variant is 5-LTR-gag-pol-vif-vpr-tat-rev-vpu-env-nef-LTR-3'.

40. (withdrawn) The HIV-1 variant virus of claim 39, wherein the nucleic acid of said HIV-1 variant virus can be detected by hybridization with a DNA probe comprising the genomic cDNA of HIV-1_{MAL}.

41. (withdrawn) The HIV-1 variant virus of claim 39, wherein the nucleic acid of said HIV-1 variant virus can be detected by hybridization with a DNA probe comprising a restriction enzyme fragment of the cDNA of HIV-1_{MAL}, and wherein the restriction

enzyme is selected from the group consisting of *Aval*, *Bam*HI, *Bg*II, *Eco*RI, *Hinc*II, *Hind*III, *Kpn*I, *Nde*I, *Pst*I, *Sac*I, and *Xba*I.

42. (cancelled)

43. (withdrawn) The HIV-1 variant virus of claim 23, wherein said HIV-1 variant virus differs genetically from HIV-1_{MAL} by 0-10.8% in Gag, 0%-8.4% in Pol, and 0%-19.8% in Env.

44. (withdrawn) The HIV-1 variant virus of claim 23, wherein the virus has the Env sequence of HIV-1_{MAL} as shown in Figure 3.

45. (withdrawn) The HIV-1 variant virus of claim 23, wherein the virus has the Gag sequence of HIV-1_{MAL} as shown in Figure 3.

46. (withdrawn) The HIV-1 variant virus of claim 23, wherein the virus has the Pol sequence of HIV-1_{MAL} as shown in Figure 3.

47. (new) A purified HIV-1 variant virus,
wherein the nucleic acid of said HIV-1 variant virus said HIV-1 variant virus is complementary to the nucleic acid of HIV-1_{MAL} deposited with the CNCM as deposit number I-641, and wherein the nucleic acid of the HIV-1 variant virus hybridizes to the

PATENT
Customer No. 22,852
Application No. 09/041,975
Attorney Docket No. 02356.0011-06000

HIV-1_{MAL} nucleic acid under stringent conditions (50% formamide, 5X SSC, at 42°C, for 12-16 hours).